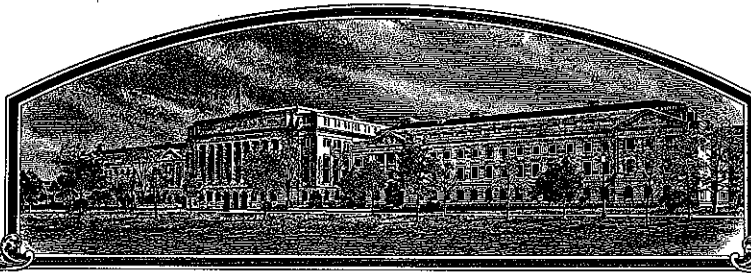


No.

200700170



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Pure-Seed Testing, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

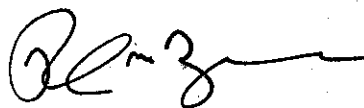
NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE FOREGOING PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

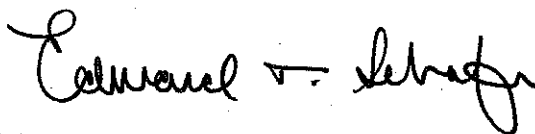
FESCUE, TALL

'Virtue II'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this second day of October, in the year two thousand and eight.

Attest:


Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

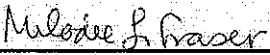


Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and The Paperwork Reduction Act (PRA) of 1995.

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

| | | | | | |
|---|--|---|--|---|--|
| 1. NAME OF OWNER Pure-Seed Testing, Inc. | | 2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME PST-5V1 | | 3. VARIETY NAME Virtue II | |
| 4. ADDRESS (Street and No., or RFD No., City, State, and ZIP Code, and Country) PO Box 449 Hubbard, OR 97032 | | 5. TELEPHONE (include area code) 503-263-0719 | | FOR OFFICIAL USE ONLY PVPO NUMBER #2 00700170 | |
| 7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) Corporation | | 8. IF INCORPORATED, GIVE STATE OF INCORPORATION Oregon | | 6. FAX (include area code) 503-263-0703 | |
| 10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) | | 9. DATE OF INCORPORATION 3 June 1974 | | FILING DATE 3/5/2007 | |
| Melodee Fraser, Ph.D. PO Box 176 Rolesville, NC 27571 | | Crystal Rose-Fricker PO Box 449 Hubbard, OR 97032 | | FILING AND EXAMINATION FEES: \$4,382.00 DATE 3/5/2007 CERTIFICATION FEE: \$768.00 DATE 9/9/2008 | |
| 11. TELEPHONE (include area code) 919-556-0146 | | 12. FAX (include area code) 919-556-0174 | | 13. E-MAIL psteast@earthlink.net | |
| 14. CROP KIND (Common Name) tall fescue | | 16. FAMILY NAME (Botanical) Gramineae | | 18. DOES THE VARIETY CONTAIN ANY TRANSGENES? (OPTIONAL) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO | |
| 15. GENUS & SPECIES NAME OF CROP Festuca arundinacea | | 17. IS THE VARIETY A FIRST GENERATION HYBRID? No | | IF SO, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR COMMERCIALIZATION. | |
| 19. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) | | 20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act) <input type="checkbox"/> YES (If "yes," answer items 21 and 22 below) <input checked="" type="checkbox"/> NO (If "no," go to item 23) | | 21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? <input type="checkbox"/> YES <input type="checkbox"/> NO | |
| a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety | | 22. DOES THE OWNER SPECIFY THAT THE CLASSES BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input type="checkbox"/> NO | | IF YES, SPECIFY THE NUMBER 1, 2, 3, etc. FOR EACH CLASS. <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED | |
| b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness | | IF YES, WHICH CLASSES? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED | | 22. DOES THE OWNER SPECIFY THAT THE CLASSES BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input type="checkbox"/> NO | |
| c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety | | IF YES, SPECIFY THE NUMBER 1, 2, 3, etc. FOR EACH CLASS. <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED | | (If additional explanation is necessary, please use the space indicated on the reverse.) | |
| d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) | | 23. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U.S. OR OTHER COUNTRIES? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO | | 24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO | |
| e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership | | IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.) | | IF YES, GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.) | |
| f. <input checked="" type="checkbox"/> Exhibit F. Declaration Regarding Deposit | | 25. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue will be deposited in a public repository and maintained for the duration of the certificate. | | | |
| g. <input checked="" type="checkbox"/> Voucher Sample (3,000 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) | | The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. | | | |
| h. <input checked="" type="checkbox"/> Filing and Examination fee (\$4,382), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office) | | Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties. | | | |
| SIGNATURE OF OWNER  | | SIGNATURE OF OWNER  | | | |
| NAME (Please print or type) Melodee L. Fraser | | NAME (Please print or type) Crystal A. Rose-Fricker | | | |
| CAPACITY OR TITLE Director of Research - East | | CAPACITY OR TITLE President | | DATE 2/1/07 | |

Origin and Breeding History of 'Virtue II' Tall Fescue

Pure-Seed Testing, Inc. (PST) developed 'Virtue II' (PST-5V1) tall fescue as a part of a breeding project to improve the summer turf performance and brown patch resistance of 'Virtue'. Plants used in the development of Virtue II were selected from plots of Virtue and plots of experimental tall fescue progenies seeded in turf evaluation trials near Rolesville, NC.

Two tall fescue turf trials, seeded during 1997 and 1998 near Rolesville, were evaluated during the summer of 2000 for turf performance and brown patch resistance. Plants were dug from six plots of Virtue and 14 plots of experimental progenies with excellent performance during August. These plants were sent to PST, near Hubbard, OR, where they were transplanted into an isolated 3150-plant nursery.

During the spring of 2001, 76 plants with dark green color, no disease symptoms and a high number of reproductive tillers were identified in this nursery. Open-pollinated seed was subsequently harvested from these plants during the summer of 2001. These 76 plants were vegetatively divided into five propagules each and transplanted into clonal rows in an isolated spaced-plant nursery, designated 5V1, during the fall of 2001.

Plants were removed from the 5V1 nursery during the spring of 2002, prior to anthesis, to increase uniformity of plant type and maturity. Plants with high susceptibility to stem rust were also removed. Remaining plants were allowed to interpollinate and seed was subsequently harvested during the summer of 2002. This seed was used to establish turf evaluation plots in Oregon, New Jersey and North Carolina during the fall of 2002. These plots produced turf of good quality. The plots in North Carolina showed good brown patch resistance and the highest turf quality in the trial during the summer of 2003.

Breeder seed of Virtue II was harvested from 238 plants in the 5V1 nursery during the summer of 2003. These plants traced their maternal origins to the following sources: 33% to Virtue (PST-5TX) and 10% to 'Tomahawk' (PST-5DX), which was developed from the same population as Virtue; 26% to 'Olympic Gold'; 17% to 'Tar Heel'; 8% to 'OnCue'; 4% to PST-5EP-7, which traced to a plant collected in Mississippi, and 2% to 'Gazelle'.

Seed production of Virtue II is limited to three generations of increase from Breeder seed: one each of Foundation, Registered and Certified. Breeder seed of Virtue II is maintained by Pure-Seed Testing, Inc and will be regenerated as necessary. Virtue II has shown stability and uniformity for three years multiplied from Breeder seed through the Certified seed generation. No off-types or variants have been observed in the production or multiplication of Virtue II tall fescue.

Exhibit B**Statement of Distinctness for 'Virtue II' Tall Fescue**

'Virtue II' is most similar to 'Virtue' and 'Olympic Gold' tall fescues.

Virtue II can be distinguished from Virtue by the following characteristics:

1. Virtue II has a mean plant height at least 12 cm shorter than Virtue (Tables 1, 2).
2. Virtue II has a mean top flag leaf height at least 10 cm shorter than Virtue (Tables 1, 2).
3. Virtue II has a mean panicle length at least 5 cm shorter than Virtue (Tables 1, 2).
4. Virtue II has a mean tiller leaf length at least 6.6 cm shorter than Virtue (Tables 1, 2).

Virtue II can be distinguished from Olympic Gold by the following characteristics:

1. Virtue II has a mean top flag leaf height at least 6.6 cm shorter than Olympic Gold (Tables 1, 2).

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, AG Box 7630, Jamie L. Whitten Building, Washington, D.C. 20250. When replying, refer to OMB No. 0581-0055 and form number in your letter. Under the PRA of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

The U.S. Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, and marital or familial status. (Not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact the USDA Office of Communications at (202) 720-2791. To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250, or call (202) 720-7327 (voice) or (202) 720-1127 (TDD). USDA is an equal opportunity employer.

**U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY PROGRAM
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705**

**EXHIBIT C
(TALL & MEADOW FESCUES)**

**OBJECTIVE DESCRIPTION OF VARIETY
TALL & MEADOW FESCUES
(*Festuca* spp.)**

| | | |
|---|---|---|
| NAME OF APPLICANT(S) Pure-Seed Testing, Inc. | TEMPORARY DESIGNATION PST-5V1 | VARIETY NAME Virtue II |
| ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code) PO Box 449 Hubbard, OR 97032 | | FOR OFFICIAL USE ONLY PVPO NUMBER #200700170 |

Place the appropriate number that describes the varietal characteristics of this variety in the boxes below. Use leading zeroes when necessary (e.g. 089). Characteristics described, including numerical measurements, should represent those that are typical for the variety. Measured data should be for SPACED PLANTS. Royal Horticultural Society or any recognized color fan may be used to determine plant colors. Characteristics marked with an asterisk * are characteristics which should be recorded.

* 1. SPECIES: (With comparison varieties, use varieties within the species of the application variety)

| | | | | | | |
|-----------------|---|----------------------------|-------------------|--------------|--------------|--|
| <u>1</u> | 1 = <i>F. arundinacea</i> (Tall) | <u>Turf Types</u> | | | | |
| | 1 = Kentucky 31 2 = Rebel | 3 = Olympic | 4 = Bonanza | 5 = Arid | 6 = Rebel II | |
| | 7 = Shortstop 8 = Silverado | 9 = Rebel Jr. | 10 = Mini Mustang | 11 = Crewcut | 12 = Bonsai | |
| | | <u>Forage Types</u> | | | | |
| | 20 = Kentucky 31 | 21 = Martin | 22 = Forager | 23 = Mozark | | |
| | 24 = Kenhy | 25 = AU Triumph | 26 = Fawn | 27 = Cajun | | |
| | <u>2 = <i>F. pratensis</i> (Meadow)</u> | | | | | |
| | 30 = Admiria | 31 = Beaumont | 32 = Comtessa | 33 = Ensign | 34 = Trader | |

* 2. CYTOLOGY:

42 Chromosome Number

3. ADAPTATION: (0 = Not Tested; 1 = Not Adapted; 2 = Adapted)

2 Transition Zone **2** West **2** Northeast _____ Other (Specify): _____

* 4. MATURITY: (Date First Headed, 10% of Panicle Emergence)

7 Maturity Class 1 = Very early () 2 = AU Triumph 3 = Early (Fawn) 4 = K31, Kenhy 5 = Medium (Rebel)

4. MATURITY: (continued)

6 = Bonanza

7 = Late (Silverado)

8 = ()

9 = Very late

Date Headed **08 May 06**

Location **Hubbard, OR**

#200700170

____ Days earlier than ____
Maturity same as ____
13 Days later than **1** } Comparison Variety

* 5. MATURE PLANT HEIGHT CM: (Average of 100 culms * INTERNODE LENGTH CM: (Table 1)
from crown to top of panicle, if panicle is nodding, straighten) (First internode subtending the flag leaf)

114.2 cm Height
36.5 cm Shorter than **1**
Height same as ____
____ cm Taller than ____ } Comparison Variety

20 cm Internode Length
7.7 cm Shorter than **1**
Length same as ____
____ cm Longer than ____ } Comparison Variety

* HEIGHT AT EAR EMERGENCE CM: (Flag leaf height from crown to flag leaf collar) (Table 1)

53.8 cm Height
33.5 cm Shorter than **1**
Height same as ____
____ cm Taller than ____ } Comparison Variety

* 6. GROWTH HABIT: (Mature Plants)

9 1 = Prostrate () 3 = Semiprostrate () 5 = Horizontal ()
7 = Semierect (Rebel) 9 = Erect (Mini Mustang)

* 7. RHIZOMES (Psuedo):

0.0 mm Length **1** 1 = Absent () 2 = Rare (Rebel) 3 = Common ()

* 8. LEAF BLADE: (Tiller leaves/ turf color)

* **7** Color: 1 = Light green () 3 = Medium light green () 5 = Green ()
7 = Medium dark green () 9 = Very dark green ()

5 Specify rating of comparison variety **8**

* **1** Anthocyanin: 1 = Absent () 9 = Present ()

* **1** Basal Hairs: 1 = Absent () 9 = Present ()

* **9** Margins: 1 = Smooth () 5 = Semi-rough () 9 = Rough ()

8. LEAF BLADE: (continued)

#200700170

- * **5** Width Class: 1 = Very coarse () 3 = Coarse () 5 = Medium ()
7 = Fine () 9 = Very Fine ()

* TILLER LEAF LENGTH CM: (First leaf subtending the flag leaf) (Table 1) * TILLER LEAF WIDTH MM: (Table 1)

20.4 cm Tiller Leaf Length
7.8 cm Shorter than 1
Length same as _____
_____ cm Taller than _____
Comparison Variety

3.1 mm Tiller Leaf Width
1.9 mm Narrower than 1
Width same as _____
1.1 mm wider than 12
Comparison Variety

FLAG LEAF LENGTH CM: (Table 1)

FLAG LEAF WIDTH MM: (Table 1)

15.4 cm Flag Leaf Length
3.2 cm Shorter than 1
Length same as _____
_____ cm Longer than _____
Comparison Variety

2.1 mm Flag Leaf Width
1.2 mm Narrower than 1
Width same as _____
_____ mm Wider than _____
Comparison Variety

* 9. LEAF SHEATH: (Basal Portion)

- * **9** Anthocyanin (seedling): 1 = Absent (K31) 9 = Present ()
* **1** Auricle Hairiness: 1 = Absent () 9 = Present ()

* 10. PANICLE: (At seed maturity except where noted.)

- * **1** Shape: 1 = Narrow-tapering () 5 = Ovate () 7 = Oblong () 9 = Other (specify)
* **7** Type: 1 = Compact (appressed) 5 = Intermediate () 7 = Open () 9 = Other (specify)
* **1** Orientation: 1 = Nodding () 9 = Erect ()
* **9** Branch Pubescence: 1 = Glabrous () 9 = Pubescent ()
* **1** Anther Color (At anthesis): 1 = Yellowish Green 2 = Green 3 = Bluish Green
4 = Purplish 5 = Reddish 6 = Other (Specify)
* **2** Glume Color (At anthesis): 1 = Yellowish Green 2 = Green 3 = Bluish Green
4 = Purplish 5 = Reddish 6 = Other (Specify)

* **18.7** cm Panicle Length (from base to tip, if nodding, straighten; after anthesis) (Table 1)

9.6 cm Shorter than 1
Length same as _____
_____ cm Longer than _____
Comparison Variety

* 11. SEED: (With Lemma & Pelea)

***2129** mg per 1000 seeds

#200700170

_____ mg Less than _____
 Weight same as _____
088 mg More than **8** } Comparison Variety

PALEA: (Keels or Margins)

1 Hairs: 1 = Absent () 5 = Short (Missouri 96) 9 = Long ()

LEMMA:

1 Hairs: 1 = Absent (Kenhy) 5 = Several () 9 = Many (Missouri 96)

6.2 mm Lemma Length (Mature)

1.5 mm Lemma Width

_____ mm Shorter than _____
 Length same as _____
0.5 mm Longer than **8** } Comparison Variety

_____ mm Narrower than _____
4 Width same as _____
0.4 mm Wider than **8** } Comparison Variety

*AWNS: **9** AWNS: 1 = Absent () 9 = Present (Falcon) _____ % Plants with awns **Will send addendum**

1.2 mm Awn length (Of those present.)

_____ mm Shorter than _____
 Length same as _____
0.4 mm Longer than **8** } Comparison Variety

12. DISEASE, INSECT, AND NEMATODE REACTION: (0= Not Tested 1= Least Resistant 9= Most Resistant)

0 Melting-out *Drechslera poae*

0 Blind Seed *Gloeotinia temulenta*

0 Leaf Spot *D. siccans*

0 Dollar Spot *Lanzia, Mollerdiscus* spp.

7 Net Blotch *D. dictyoides*

5 Stem Rust *Puccinia graminis*

7 Brown Patch *Rhizoctonia solani*

0 T. Blight *Typhula incarnata*

0 C. Leaf Spot *Cercospora fectuae*

6 Pythium Blight *Pythium* spp.

0 Pink Snow Mold *Gerlachia nivalis*

0 Powdery Mildew *Erysiphe graminis*

0 Silver Top *F. tricinctum, F. roseum*

6 Crown Rust *Puccinia coronata*

7 Other Disease **Gray leaf spot (*Pyricularia grisea*)**

_____ Other Insect _____

_____ Other Nematode _____

13. ENVIRONMENTAL STRESS

5 Drought Stress 1 = Susceptible () 5 = Tolerant () 9 = Resistant ()

5 Shade Stress 1 = Susceptible () 5 = Tolerant () 9 = Resistant ()

5 Winter Stress

1 = Susceptible () 5 = Tolerant () 9 = Resistant ()

14. GIVE VARIETY OR VARIETIES THAT MOST CLOSELY RESEMBLE THE APPLICATION VARIETY. For the following characteristics, indicate the degree of resemblance with the following scale:

1 = Application variety is less than comparison variety; 2 = Same as 3 = More than, better, greater, darker, etc.

| Character | Varieties | Rating | Character | Varieties | Rating |
|---------------|---------------|----------|---------------|---------------|----------|
| Leaf Width | Virtue | 1 | Leaf Color | Virtue | 3 |
| Panicle Color | | | Panicle Shape | | |
| Seed Size | Virtue | 1 | Cold Injury | Virtue | 2 |
| Winter Color | Virtue | 2 | Heat | Virtue | 3 |
| Disease | Virtue | 3 | | | |

* 15. EXPERIMENTAL: Give a brief summary of the experimental design utilized to collect the data used on this form. Cultural conditions, number of plants measured and plant spacing must be specified.

A seed yield trial was seeded during fall of 2004 near Hubbard, OR at 3.6 kg/ha. Twenty-five tillers from each of three replications were measured at maturity in 2005 and 2006 for a total of 75 tillers/cultivar.

Exhibit D**Additional Description of 'Virtue II' Tall Fescue**

1. 'Virtue II' has shown good brown patch resistance in NC turf trials (Tables 3, 4).
2. 'Virtue II' has good turf quality in NC (Tables 3, 4), OR (Tables 5, 6), and Holland turf trials (Table 7).
3. 'Virtue II' has shown good drought tolerance in an Oregon turf trial (Table 6).

Table 1. 2006 mean morphological measurements for entries in a tall fescue seed yield trial seeded fall of 2004 near Hubbard, OR.

| Entry | Plant Height (cm) | Flag Leaf Height (cm) | Internode Length (cm) | Tiller Leaf Length (cm) | Tiller Leaf Width (mm) | Flag Leaf Length (cm) | Flag Leaf Width (mm) | Panicle Length (cm) | Tiller Count (#/100 cm ²) |
|-------------------|-------------------|-----------------------|-----------------------|-------------------------|------------------------|-----------------------|----------------------|---------------------|---------------------------------------|
| Kentucky 31 | 150.7 | 87.3 | 27.7 | 28.2 | 5.0 | 18.6 | 3.4 | 28.3 | 17.9 |
| Virtue | 131.1 | 78.1 | 25.7 | 27.0 | 3.9 | 16.5 | 2.7 | 25.0 | 48.1 |
| Olympic Gold | 115.8 | 68.8 | 23.1 | 20.4 | 3.2 | 13.2 | 2.4 | 20.3 | 51.3 |
| Virtue II | 114.2 | 53.8 | 20.0 | 20.4 | 3.1 | 15.4 | 2.1 | 18.7 | 39.9 |
| LSD (0.05) | 3.1 | 3.1 | 1.2 | 2.0 | 0.4 | 1.4 | 0.4 | 1.3 | 8.9 |

Table 2. 2005 mean morphological measurements for entries in a tall fescue seed yield trial seeded fall of 2004 near Hubbard, OR.

| Entry | Plant Height (cm) | Flag Leaf Height (cm) | Internode Length (cm) | Tiller Leaf Length (cm) | Tiller Leaf Width (mm) | Flag Leaf Length (cm) | Flag Leaf Width (mm) | Panicle Length (cm) | Tiller Count (#/100 cm ²) |
|-------------------|-------------------|-----------------------|-----------------------|-------------------------|------------------------|-----------------------|----------------------|---------------------|---------------------------------------|
| Kentucky 31 | 143.5 | 94.7 | 29.4 | 30.4 | 4.4 | 21.2 | 3.7 | 29.0 | 12.4 |
| Virtue | 131.5 | 79.7 | 30.3 | 30.5 | 5.1 | 21.4 | 4.3 | 28.0 | 20.8 |
| Olympic Gold | 127.0 | 76.0 | 29.4 | 23.1 | 3.8 | 16.0 | 2.8 | 21.9 | 32.9 |
| Virtue II | 119.5 | 69.4 | 28.5 | 23.3 | 3.6 | 17.3 | 2.9 | 23.0 | 28.6 |
| LSD (0.05) | 4.4 | 3.7 | 3.2 | 1.6 | 0.4 | 1.8 | 0.4 | 1.4 | 6.6 |

Table 3. 2006 mean brown patch ratings and turf quality ratings for entries in a tall fescue turf trial seeded fall of 2005 near Rolesville, NC.

| Entry | Brown Patch | Turf Quality | |
|-------------------|------------------------|------------------------|------------|
| | | Summer | Overall |
| Virtue II | 7.3¹ | 6.3² | 6.7 |
| Tar Heel II | 8.0 | 5.3 | 5.6 |
| Olympic Gold | 5.7 | 4.8 | 5.3 |
| Ebony | 1.7 | 2.8 | 4.6 |
| Kentucky 31 | 3.7 | 2.0 | 2.1 |
| LSD (0.05) | 2.3 | 1.2 | 1.0 |

¹9 = no disease²9 = ideal

Table 4. Mean turf quality and brown patch ratings for entries in a tall fescue turf trial seeded fall of 2003 near Rolesville, NC.

| Entry | Turf Quality | | | Brown Patch 2004 |
|-------------------|------------------------|------------|------------|------------------------|
| | 2004 | 2005 | Mean | |
| Virtue II | 5.3¹ | 5.1 | 5.2 | 7.0² |
| Tar Heel II | 5.5 | 5.1 | 5.3 | 6.3 |
| Virtue | 3.5 | 2.9 | 3.2 | 5.3 |
| Olympic Gold | 4.7 | 3.9 | 4.3 | 4.7 |
| Kentucky 31 | 2.0 | 2.0 | 2.0 | 4.0 |
| Matador | 4.0 | 3.6 | 3.8 | 2.4 |
| LSD (0.05) | 0.8 | 1.5 | 0.9 | 1.9 |

¹9 = ideal; ²9 = no disease

Table 5. 2006 mean turf quality ratings for entries in a tall fescue turf trial seeded fall of 2005 near Hubbard, OR.

| Entry | Mean |
|-------------------|------------------|
| PST-R5PNK | 7.0 ¹ |
| Matador | 6.3 |
| Virtue II | 5.9 |
| Tar Heel II | 5.6 |
| Jaguar 3 | 5.0 |
| PST-5CAN | 3.4 |
| LSD (0.05) | 0.8 |

¹9 = ideal

Table 6. 2006 mean summer turf quality and drought ratings for entries in a tall fescue turf trial seeded fall of 2003 near Hubbard, OR.

| Entry | Turf Quality 29 June | Drought Stress 09 Aug | Drought Recovery 14 Aug |
|-------------------|-------------------------|--------------------------|----------------------------|
| 3.0537 | 6.0 ¹ | 6.3 ² | 7.8 ³ |
| Kentucky 31 | 3.0 | 6.2 | 7.5 |
| Virtue II | 6.7 | 5.3 | 7.2 |
| Wolfpack | 6.0 | 5.7 | 7.2 |
| Safari | 5.7 | 5.3 | 7.0 |
| Olympic Gold | 6.0 | 5.2 | 6.7 |
| Matador | 6.0 | 5.3 | 6.5 |
| Coronado Gold | 5.7 | 5.0 | 6.3 |
| Tar Heel II | 6.0 | 4.3 | 6.0 |
| Silverstar | 5.7 | 4.3 | 5.7 |
| Innovator | 6.0 | 3.8 | 4.7 |
| PST-5MHF | 6.7 | 3.3 | 4.3 |
| LSD (0.05) | 0.9 | 1.9 | 2.1 |

¹9 = ideal²9 = no wilting³9 = 100% recovered

Table 7. Mean turf quality ratings for entries in a tall fescue turf trial seeded fall of 2004 at den Haan Farm, Bergen op zoom, Holland.

| Entry | Turf Quality | | | |
|-------------------|------------------|------------|------------|------------|
| | June | Oct | Dec | Mean |
| PST-5D25 | 8.0 ¹ | 8.0 | 8.0 | 8.0 |
| Matador | 7.0 | 7.0 | 8.7 | 7.6 |
| Virtue II | 6.7 | 8.7 | 6.0 | 7.1 |
| Tomahawk GT | 5.7 | 8.0 | 7.0 | 6.9 |
| Apache II | 5.0 | 6.3 | 7.7 | 6.3 |
| OnCue | 5.3 | 7.3 | 5.3 | 6.0 |
| Murietta | 5.0 | 7.3 | 5.3 | 5.9 |
| Safari | 4.3 | 6.7 | 6.7 | 5.9 |
| Eldorado | 4.3 | 5.3 | 6.7 | 5.4 |
| LSD (0.05) | 1.2 | 1.6 | 1.7 | 0.9 |

¹9 = ideal

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE**EXHIBIT E**
STATEMENT OF THE BASIS OF OWNERSHIP

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

| | | |
|---|--|---|
| 1. NAME OF APPLICANT(S) Pure-Seed Testing, Inc. | 2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER PST-5V1 | 3. VARIETY NAME Virtue II |
| 4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) PO Box 449 Hubbard, OR 97032 | 5. TELEPHONE (include area code) 503-263-0719 | 6. FAX (include area code) 503-263-0703 |
| 7. PVPO NUMBER #200700170 | | |

8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain. ☒ YES ☐ NO9. Is the applicant (individual or company) a U.S. national or U.S. based company? If no, give name of country. ☒ YES ☐ NO10. Is the applicant the original owner? ☒ YES ☐ NO If no, please answer one of the following:

a. If original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. national(s)?

☐ YES ☐ NO If no, give name of country

b. If original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?

☐ YES ☐ NO If no, give name of country

11. Additional explanation on ownership. (Trace ownership from original breeder to current owner. Use the reverse for extra space if needed):

Pure-Seed Testing, Inc. has licensed Virtue II to Pennington Seed.**PLEASE NOTE:**

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

STD-470-E (04-03) designed by the Plant Variety Protection Office using Word 2000

REPRODUCE LOCALLY. Include form number and date on all reproductions.

FORM APPROVED - OMB NO. 0581-0055

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotope, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705

EXHIBIT F
DECLARATION REGARDING DEPOSIT

| | | |
|---|---|---|
| NAME OF OWNER (S) Pure-Seed Testing, Inc. | ADDRESS (Street and No., or RD No., City, State, and ZIP Code and Country) PO Box 449 Hubbard, OR 97032 | TEMPORARY OR EXPERIMENTAL DESIGNATION PST-5V1 |
| | | VARIETY NAME Virtue II |
| NAME OF OWNER REPRESENTATIVE(S) Melodee Fraser, Ph.D. | ADDRESS (Street and No., or RD No., City, State, and ZIP Code and Country) PO Box 176, Rolesville, NC 27571 | FOR OFFICIAL USE ONLY |
| Crystal Rose-Fricker | PO Box 449, Hubbard, OR 97032 | PVPO NUMBER #200700170 |

I do hereby declare that during the life of the certificate a viable sample of propagating material of the subject variety will be deposited, and replenished as needed periodically, in a public repository in the United States in accordance with the regulations established by the Plant Variety Protection Office.


Signature

2/1/07
Date